

Application No. 09/595,005

RD-27442-2

## REMARKS

Claims 1 to 12 and 16 to 21 are pending.

Claims 4 to 12 were rejected under 35 U.S.C. §112, second paragraph.

Claim 11 has been amended to recite "mixture entities with improved catalyst turnover number" and claim 12 has been amended to recite an "entity... identified by a catalyst turnover number." The amendments are based on the EXAMPLES. The amendments should overcome the 35 U.S.C. §112, second paragraph rejections of claims 11 and 12.

Claims 4 to 10 have been amended to delete "further" thereby overcoming the 35 U.S.C. §112, second paragraph rejection of these claims.

Claims 1 to 12 and 16 to 21 were rejected under 35 U.S.C. §103(a) over Cong et al. and Brown et al. and claims 1 to 12 and 16 to 21 were rejected under 35 U.S.C. §103(a) over Nan et al. and Brown et al.

First, the references have no *In re Lee* teaching that would have led one skilled in the art to combine the various Cong et al., Brown et al. and Nan et al. teachings. *See In re Lee*, 277 F.3d 1338, 61 USPQ 2d 1430, (Fed. Cir. 2002). Brown does not relate to discovery of catalysts. One skilled in the art would not have been led to "executing a genetic algorithm based on" a "catalyst turnover number" to combinatorially select a best catalyst system by a teaching that does not mention catalysis (Brown et al.). this is particularly so in the unpredictable field of catalytic chemistry. *See In re Murzocchi*, 439 F.2d 220, 223-24, 169 USPQ 367, 369-70 (CCPA 1971).

Second even if improperly combined, the references do not teach or suggest "executing a genetic algorithm based on" a "catalyst turnover number." The references do not establish a prima facie case of obviousness. *See In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

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For these reasons, the rejections of claims 1 to 12 and 16 to 21 under 35 U.S.C. §103(a) over Cong et al. and Brown et al. and claims 1 to 12 and 16 to 21 under 35 U.S.C. §103(a) over Nan et al. and Brown et al. should be withdrawn.

In view of the foregoing amendments and remarks, reconsideration and allowance of claims 1 to 12 and 16 to 21 are respectfully requested.

Should the Examiner believe that any further action is necessary in order to place this application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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